

2810-011755-P00-2016-04-Haroldson

USDA, Forest Service

**PLAN OF OPERATIONS FOR MINING ACTIVITIES
ON NATIONAL FOREST SYSTEM LANDS**

FS-2800-5 (Rev. 3/08)
OMB 0596-0022

USE OF THIS FORM IS OPTIONAL 1st TIME USERS SHOULD DIRECT QUESTIONS REGARDING THIS FORM OR
REGULATIONS (36 CFR 228A) TO THE FOREST SERVICE DISTRICT OFFICE NEAREST YOUR AREA OF INTEREST.

Submitted by:

Signature

Claim Holder

Title

05-17-16

Date
(mm/dd/yy)

Signature

Title

Date
(mm/dd/yy)

Plan Received by:

Signature

Geologist

Title

5/17/16

Date
(mm/dd/yy)

Rebecca Anderson

I. GENERAL INFORMATION

- A. Name of Mine/Project: LOLO QUEEN PLACER
- B. Type of Operation: Small scale Section Dredging
(lode, placer, mill, exploration, development, production, other)
- C. Is this a (☒ new/☐ continuing) operation? (check one).
If continuing a previous operation, this plan (☐ replaces/☐ modifies/☐ supplements) a previous plan of operations. (check one)
- D. Proposed start-up date (mm/dd/yy) of operation: 7-15-2016
- E. Expected total duration of this operation: 2 1/2 years (for duration of NPDES Gen. Permit)
- F. If seasonal, expected date (mm/dd/yy) of annual reclamation/stabilization close out: 8-15-2016
- G. Expected date (mm/dd/yy) for completion of all required reclamation: 8-15-2021 18

II. PRINCIPALS

- A. Name, address and phone number of operator:

David G. Haroldson

- B. Name, address, and phone number of authorized field representative (if other than the operator).
Attach authorization to act on behalf of operator.

- C. Name, address and phone number of owners of the claims (if different than the operator):

(If more space is needed to fill out a block of information, use additional sheets and attach form)

- D. Name, address and phone number of any other lessees, assigns, agents, etc., and briefly describe their involvement with the operation, if applicable:

P.O. Box 461501
Linda R. Haroldsen Escondido, Ca. 92046-1501 Wife Dredge Tender.

III. PROPERTY OR AREA

(Name of claim, if applicable, and the legal land description where the operation will be located.)

MC#	Name	Section	Township	Range
1MC 215176	LOLO Queen Placer	32	35 N	6 E

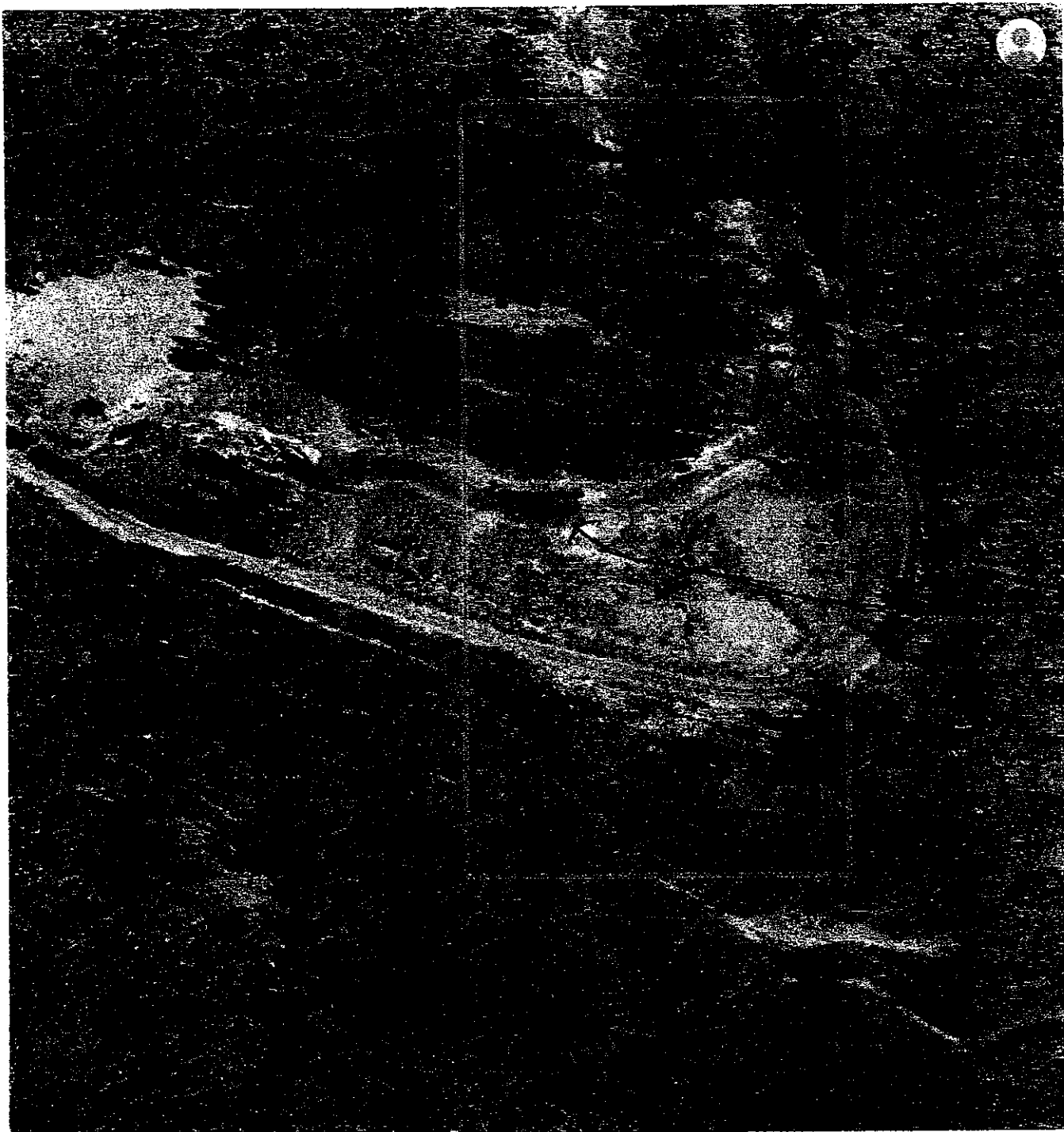
IV. DESCRIPTION OF THE OPERATION

- A. **Access.** Show on a map (USGS quadrangle map or a National Forest map, for example) the claim boundaries, if applicable, and all access needs such as roads and trails, on and off the claim. Specify which Forest Service roads will be used, where maintenance or reconstruction is proposed, and where new construction is necessary. For new construction, include construction specifications such as widths, grades, etc., location and size of culverts, describe maintenance plans, and the type and size of vehicles and equipment that will use the access routes.

Access To the claim will be from Lolo creek road.
No additional roads will be made.
Will be parking motorhome + Toyota P.V. on existing
clearing by paved road.

- B. **Map, Sketch or Drawing.** Show location and layout of the area of operation. Identify any streams, creeks or springs if known. Show the size and kind of all surface disturbances such as trenches, pits, settling ponds, stream channels and run-off diversions, waste dumps, drill pads, timber disposal or clearance, etc. Include sizes, capacities, acreage, amounts, locations, materials involved, etc.

See Map A on back of this page.



100'
Dredge

Self
Containe
Motor
home

150'
Dredge

100'
Dredge

A

#13

- C. **Project Description.** Describe all aspects of the operation including mining, milling, and exploration methods, materials, equipment, workforce, construction and operation schedule, power requirements, how clearing will be accomplished, topsoil stockpile, waste rock placement, tailings disposal, proposed number of drillholes and depth, depth of proposed suction dredging, and how gravels will be replaced, etc. Calculate production rates of ore. Include justification and calculations for settling pond capacities, and the size of runoff diversion channels.

Dredge, 2 People, Depth of dredge holes unknown down to bedrock
If Less than 10' Gravels will be replaced by anchoring dredge
with discharge going back into hole.

1st time on this claim so ore production rates are unknown.
Operation schedule July 15 to Aug 15 7 days a week Daylight hours.

- D. **Equipment and Vehicles.** Describe that which is proposed for use in your operation (Examples: drill, dozer, wash plant, mill, etc.). Include: sizes, capacity, frequency of use, etc.

4" dredge 6½ hp.

- E. **Structures.** Include information about fixed or portable structures or facilities planned for the operation. Show locations on the map. Include such things as living quarters, storage sheds, mill buildings, thickener tanks, fuel storage, powder magazines, pipelines, water diversions, trailers, sanitation facilities including sewage disposal, etc. Include engineering design and geotechnical information for project facilities, justification and calculations for sizing of tanks, pipelines and water diversions, etc.

See Map A

V. ENVIRONMENTAL PROTECTION MEASURES (SEE 36 CFR 228.8)

- A. **Air Quality.** Describe measures proposed to minimize impacts on air quality such as obtaining a burning permit for slash disposal or dust abatement on roads.

Spark arrestor on dredge engine.

B. Water Quality. State how applicable state and federal water quality standards will be met. Describe measures or management practices to be used to minimize water quality impacts and meet applicable standards.

1. State whether water is to be used in the operation, and describe the quantity, source, methods and design of diversions, storage, use, disposal, and treatment facilities. Include assumptions for sizing water conveyance or storage facilities.
2. Describe methods to control erosion and surface water runoff from all disturbed areas, including waste and tailings dumps.
3. Describe proposed surface water and groundwater quality monitoring, if required, to demonstrate compliance with federal or state water quality standards.
4. Describe the measures to be used to minimize potential water quality impacts during seasonal closures, or for a temporary cessation of operations.
5. If land application is proposed for waste water disposal, the location and operation of the land application system must be described. Also describe how vegetation, soil, and surface and groundwater quality will be protected if land application is used.

Monitor 150' down stream for turbidity.

C. Solid Wastes. Describe the quantity and the physical and chemical characteristics of solid waste produced by the operation. Describe how the wastes will be disposed of including location and design of facilities, or treated so as to minimize adverse impacts.

Stored in motorhome.

D. Scenic Values. Describe protection of scenic values such as screening, slash disposal, or timely reclamation.

Will not be removing trees or brush.

- E. **Fish and Wildlife.** Describe measures to maintain and protect fisheries and wildlife, and their habitat (includes threatened, endangered, and sensitive species) affected by the operations.

Will meet with U.S. Forest Fisheries Rep.

- F. **Cultural Resources.** Describe measures for protecting known historic and archeological values, or new sites in the project area.

If found will stop operations & contact F.S.

- G. **Hazardous Substances.**

1. Identify the type and volume of all hazardous materials and toxic substances which will be used or generated in the operations including cyanide, solvents, petroleum products, mill, process and laboratory reagents.

About 1/2 gal. of gas per hour of operation.

2. For each material or substance, describe the methods, volume, and frequency of transport (include type of containers and vehicles), procedures for use of materials or substances, methods, volume, and containers for disposal of materials and substances, security (fencing), identification (signing/labeling), or other special operations requirements necessary to conduct the proposed operations.

All fuel will be stored in my Toyota P.V.
A 1 gal. fuel tank will be used to refuel dredge. A funnel will be used & absorbent towel to catch any spill.

3. Describe the measures to be taken for release of a reportable quantity of a hazardous material or the release of a toxic substance. This includes plans for spill prevention, containment, notification, and cleanup.

A spill kit will be on site & any cleanup material will be removed from forest.

- H. **Reclamation.** Describe the annual and final reclamation standards based on the anticipated schedule for construction, operations, and project closure. Include such items as the removal of structures and facilities including bridges and culverts, a revegetation plan, permanent containment of mine tailings, waste, or sludges which pose a threat of a release into the environment, closing ponds and eliminating standing water, a final surface shaping plan, and post operations monitoring and maintenance plans.

Dredge holes will be filled.

VI. FOREST SERVICE EVALUATION OF PLAN OF OPERATIONS

- A. Required changes/modifications/special mitigation for plan of operations:

2810-011755-P00-2016-04

- B. **Bond.** Reclamation of all disturbances connected with this plan of operations is covered by Reclamation Performance Bond No. 2810-011755-P00-2016-04, dated (mm/dd/yy) 06/20/16 signed by P. Hordson (Principal) and X (Surety), for the penal sum of . This Reclamation Performance Bond is a guarantee of faithful performance with the terms and conditions listed below, and with the reclamation requirements agreed upon in the plan of operations. This Reclamation Performance Bond also extends to and includes any unauthorized activities conducted in connection with this operation.

The bond amount for this Reclamation Performance Bond was based on a bond calculation worksheet. The bond amount may be adjusted during the term of this proposed plan of operations in response to changes in the operations or to changes in the economy. Both the Reclamation Performance Bond and the bond calculation worksheet are attached to and made part of this plan of operations. Acceptable bond securities (subject to change) include:

1. Negotiable Treasury bills and notes which are unconditionally guaranteed as to both principle and interest in an amount equal at their par value to the penal sum of the bond; or
 2. Certified or cashier's check, bank draft, Post Office money order, cash, assigned certificate of deposit, assigned savings account, blanket bond, or an irrevocable letter of credit equal to the penal sum of the bond.
-

VII. TERMS AND CONDITIONS

- A. If a bond is required, it must be furnished before approval of the plan of operations.
- B. Information provided with this plan marked confidential will be treated in accordance with the agency's laws, rules, and regulations.
- C. Approval of this plan does not constitute certification of ownership to any person named herein and/or recognition of the validity of any mining claim named herein.
- D. Approval of this plan does not relieve me of my responsibility to comply with other applicable state or federal laws, rules, or regulations.
- E. If previously undiscovered cultural resources (historic or prehistoric objects, artifacts, or sites) are exposed as a result of operations, those operations will not proceed until notification is received from the Authorized Officer that provisions for mitigating unforeseen impacts as required by 36 CFR 228.4(e) and 36 CFR 800 have been complied with.
- F. This plan of operations has been approved for a period of _____ or until (mm/dd/yy) _____. A new or revised plan must be submitted in accordance with 36 CFR part 228, subpart A, if operations are to be continued after that time period.

VIII. OPERATING PLAN ACCEPTANCE

☒ ☐ We have reviewed and agreed to comply with all conditions in this plan of operations including the required changes, modifications, special mitigation, and reclamation requirements.

☒ ☐ We understand that the bond will not be released until the Authorized Officer in charge gives written approval.

Signature of ☒ Operator (or ☐ Authorized Representative)

June 28, 2016

(Date)

(mm/dd/yy)

IX. OPERATING PLAN APPROVAL

Brandon Knapton

(Name)

District Ranger

(Title)

7/6/2016

(Date)

(mm/dd/yy)

Signature of (Authorized Officer)

Burden and Non-Discrimination Statement

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0022. The time required to complete this information collection is estimated to average 12 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.

(If more space is needed to fill out a block of information, use additional sheets and attach form)

Lolo Creek Mitigations and Terms and Conditions

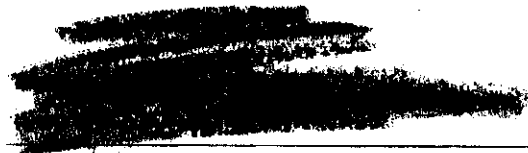
1. Operations will occur only within the wetted perimeter below the ordinary high water line during a dredge season extending from July 15 through August 15.
2. Before dredge mining begins, operators must submit a POO to the Forests that includes all of the operating conditions, design features, and mitigation measures, and specifies the location, approximate amount of surface area they plan to dredge, and likely dates of operation. The operating plan will be used to establish channel-monitoring sites, and is not intended to constrain the timing and location of dredge operations.
3. Prior to dredging, operators must meet with a Forest Service fisheries biologist who will inspect the proposed dredge sites. No dredging will be allowed in areas of known bull trout or steelhead spawning or in areas identified as spawning habitat. *Miners will also avoid identified Lolo Creek lamprey spawning and ammocoete rearing areas, and western pearlshell mussel beds. The areas that would be required to be avoided would generally be specific locations within the proposed dredging areas rather than extensive stream reaches.*
4. The suction dredge will have a nozzle diameter of 5 inches or less and a horsepower rating of 15 horsepower or less.
5. Pump intakes must be covered with 3/32-mesh screen *or finer*.
6. Dredge sites must be located in areas of large substrate not preferred for spawning steelhead and bull trout, and operators are required to conduct all dredge mining 50 feet or more from identified spawning areas.
7. Dredging operations must take place during daylight hours.
8. Dredging must be conducted in a manner so as to prevent the undercutting and destabilization of stream banks, and may not otherwise disturb streambanks.
9. If streambanks are disturbed in any way, they must be restored to the original contour and re-vegetated with native species at the end of the dredging season.
10. Camping areas, paths, and other disturbed sites that are located along stream banks and that are associated with dredge operations must be re-vegetated or otherwise restored to their original conditions at the end of the dredge season.
11. Operators must cease activities during wet periods when project activities are causing excessive ground disturbance (visible ground disturbance due to soil saturation) or excessive damage (muddying/rutting) to roads.
12. Dredges must not operate in such a way that the current or the discharge from the sluice is directed into the bank in a way that causes erosion or destruction of the natural form of the channel, that undercuts the bank, or that widens the channel.
13. Operators must not undermine, excavate, or remove any stable woody debris or boulders that extend from the bank into the channel. This will prevent destabilization of streambanks and the stream channel.
14. Operators must not remove, relocate, or disturb stable in-stream woody debris or boulders greater than 12 inches in diameter, unless it was determined during the pre-mining site review that the predominate substrate was 12 inches and retaining larger boulders would be more beneficial to that particular reach. This design feature will prevent the destabilization of the stream channel and assure that potential fish habitat would not be disturbed.
15. The operator will not remove any large down or standing woody debris or trees for firewood within one tree length of the stream.

Lolo Creek Mitigations and Terms and Conditions

16. Operators will not move cobbles in the stream course to the extent that the deepest and fastest portion of the stream channel (i.e., the thalweg) is altered or moved.
17. No mechanized equipment will be operated below the mean high water mark except for the dredge itself and any life support system necessary to operate the dredge. No mechanized equipment other than the suction dredge will be used for conducting operations.
18. Dredging must not dam the stream channel.
19. Dredges must not operate in the gravel bar areas at the tails of pools.
20. Dredges must not operate in such a way that fine sediment from the dredge discharge blankets gravel bars.
21. Operators must visually monitor the stream for 150 feet downstream of the dredging operation. If noticeable turbidity is observed downstream, the operation must cease immediately or decrease in intensity until no increase in turbidity is observed 150 feet downstream.
22. Shallow areas must be restored to their original grade each day and natural pools may not be filled. Tailings must be redistributed to avoid creating unstable spawning gravels.
23. All dredge piles must be dispersed and backfill all dredge holes before moving to a new dredge location and by the end of the operating season, no later than August 15.
24. Dredging operations must shut down immediately if any sick, injured, or dead specimen of a threatened or endangered species is found. The finder must notify the Vancouver Field Office of NOAA Law Enforcement at (360) 418-4246 for steelhead trout, or USFWS Division of Law Enforcement at (208) 378-5333 for bull trout. The finder must take care in handling sick or injured specimens to ensure effective treatment, and in handling dead specimens to preserve biological material in the best possible condition. The finder must also ensure that evidence intrinsic to the specimen is not disturbed unnecessarily. In addition, if any fish eggs are excavated or if destruction of redds is observed, operators must contact the CNF and receive authorization to proceed prior to resuming operations. Operators must record the date, time, location, and possible cause of fish injury or death.
25. Operators must maintain a minimum spacing of at least 150 linear feet of stream channel between suction dredging operations.
26. Gasoline and other petroleum products must be stored in spill-proof containers at a location that minimizes the opportunity for accidental spillage.
27. The suction dredge must be checked for leaks, and all leaks repaired, prior to the start of operations each day. The fuel container used for refueling must contain less fuel than the amount needed to fill the tank. The suction dredge must be anchored to the stream bank when refueling in the water, so that fuel does not need to be carried out into the stream. Unless the dredge has a detachable fuel tank, operators may transfer no more than one gallon of fuel at a time during refilling. Operators must use a funnel while pouring, and place an absorbent material such as a towel under the fuel tank to catch any spillage from refueling operations. A spill kit must be available in case of accidental spills. Soil contaminated by spilled petroleum products, must be excavated to the depth of saturation and removed from the National Forest for proper disposal.
28. Operators will not entrain, mobilize, or disperse any mercury discovered during mining operations. Operators must cease operations and notify the Forest Service if mercury is encountered in dredged material. Operators must not use mercury, cyanide, or any other hazardous or refined substance to recover or concentrate gold.

Lolo Creek Mitigations and Terms and Conditions

29. All human waste must be kept more than 200 feet away from any live water. All refuse from dredging activities must be packed out and disposed of properly.
30. Operators must obtain all Idaho and Federal permits including the Environmental Protection Agency's NPDES permit, the Corps of Engineers/State of Idaho's joint 404/Permit to Alter a Stream Channel, and State 401 certification. Operators must also comply with all additional conditions or measures stipulated in the permits, and must comply with the State of Idaho's Placer Mining - Best Management Practices (IDWR 2004).
31. Heritage resource surveys were conducted in compliance with the National Historic Preservations Act, and various sites were identified in the area. If additional heritage resources are found during the implementation of the project, project activities are to cease. The Forest Archaeologist will be notified, and an assessment will be made regarding the effect of continued activities on the newly identified heritage resource.
32. To prevent the threat of aquatic invasive species, Suction dredges, tools used while dredging, and associated equipment must be thoroughly cleaned with a Pressure washer and dried at least 5 days prior to use on the National Forest.



Miner's Signature

7-14-16
Date

Suction Dredging Site Delineation Sketch Form - 15m Reaches

Reach # 1

Upstream is top of page. Number, Flag, Photo, Time, and UTM Features. Cross-hatch No-Gos

Stream: Lolo Ck

Mining Site Name: Asolagen

Date: 6/27/16 Time: 1302

Stream Reach: Lower of 3 597536
5131459

Upstream Boundary UTM (RBLU):

Downstream Boundary UTM (RBLU):

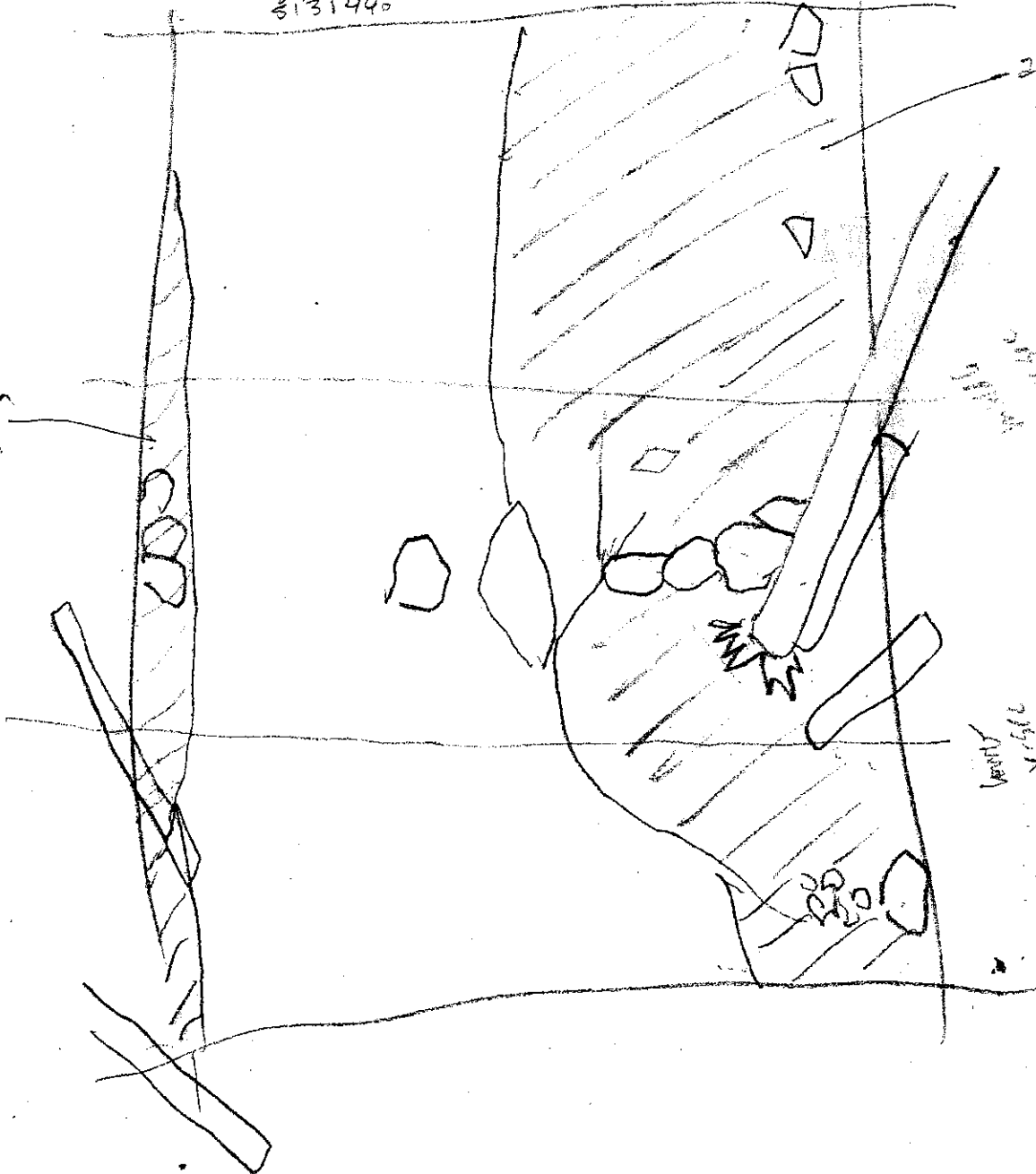
597568
5131440

middle section

avoid dredging

avoid dredging

avoid dredging



Suction Dredging Site Delineation Sketch Form – 15m Reaches

Reach # 1

Upstream is top of page. Number, Flag, Photo, Time, and UTM Features. Cross-hatch No-Gos?

Stream: Wollock

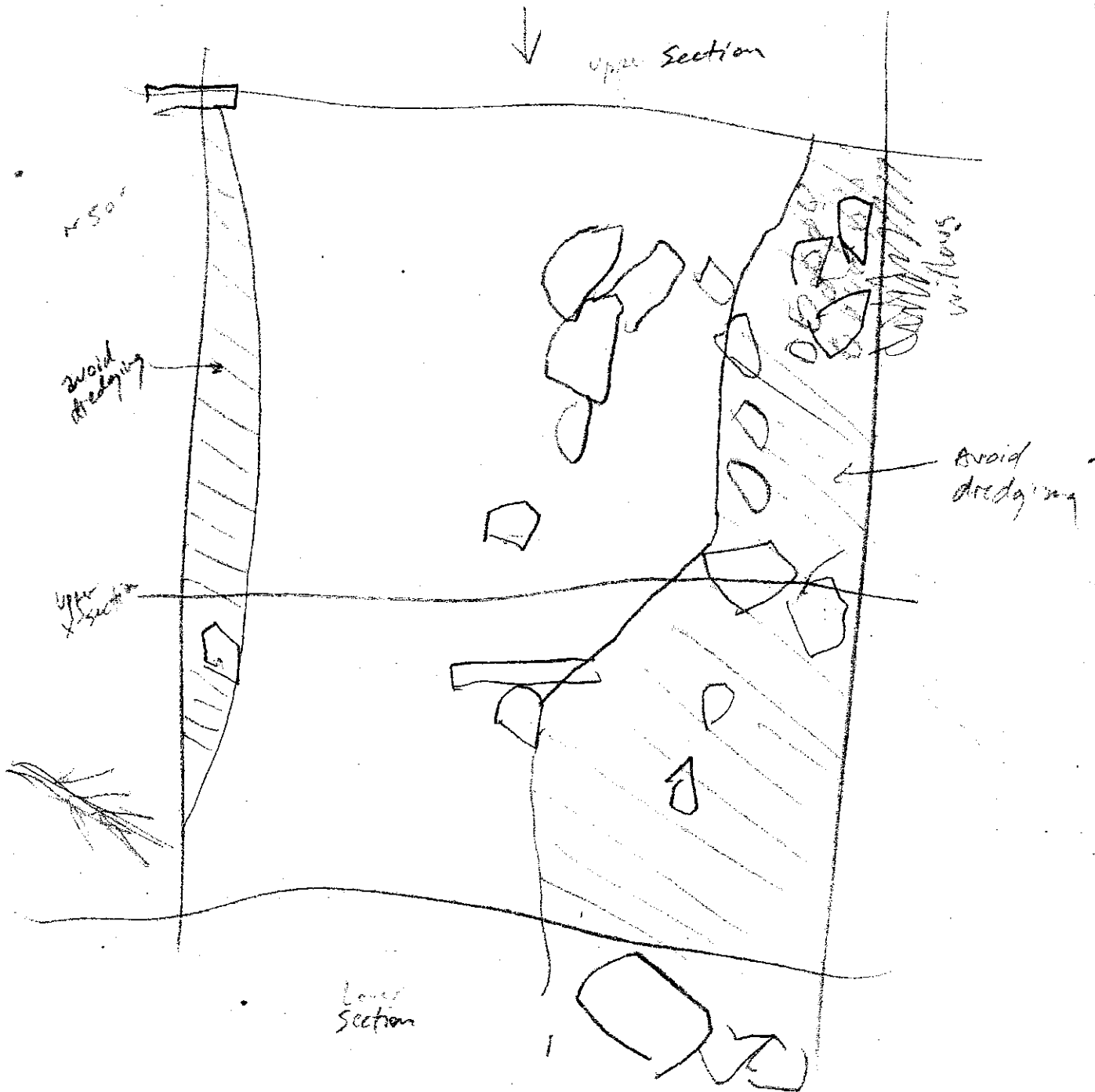
Mining Site Name: Horseshoe

Date: 6/29/16 Time: 1308

Stream ^{Section} Reach: Middle of 3

Upstream Boundary UTM (RBLU): 597574 5131475

Downstream Boundary UTM (RBLU): 597576 5131459



Suction Dredging Site Delineation Sketch Form – 15m Reaches

Reach #

Upstream is top of page. Number, Flag, Photo, Time, and UTM Features. Cross-hatch No-Gos,

Stream: Section 2

Mining Site Name: Section 2

Date: 2/20/02 Time: 1:30

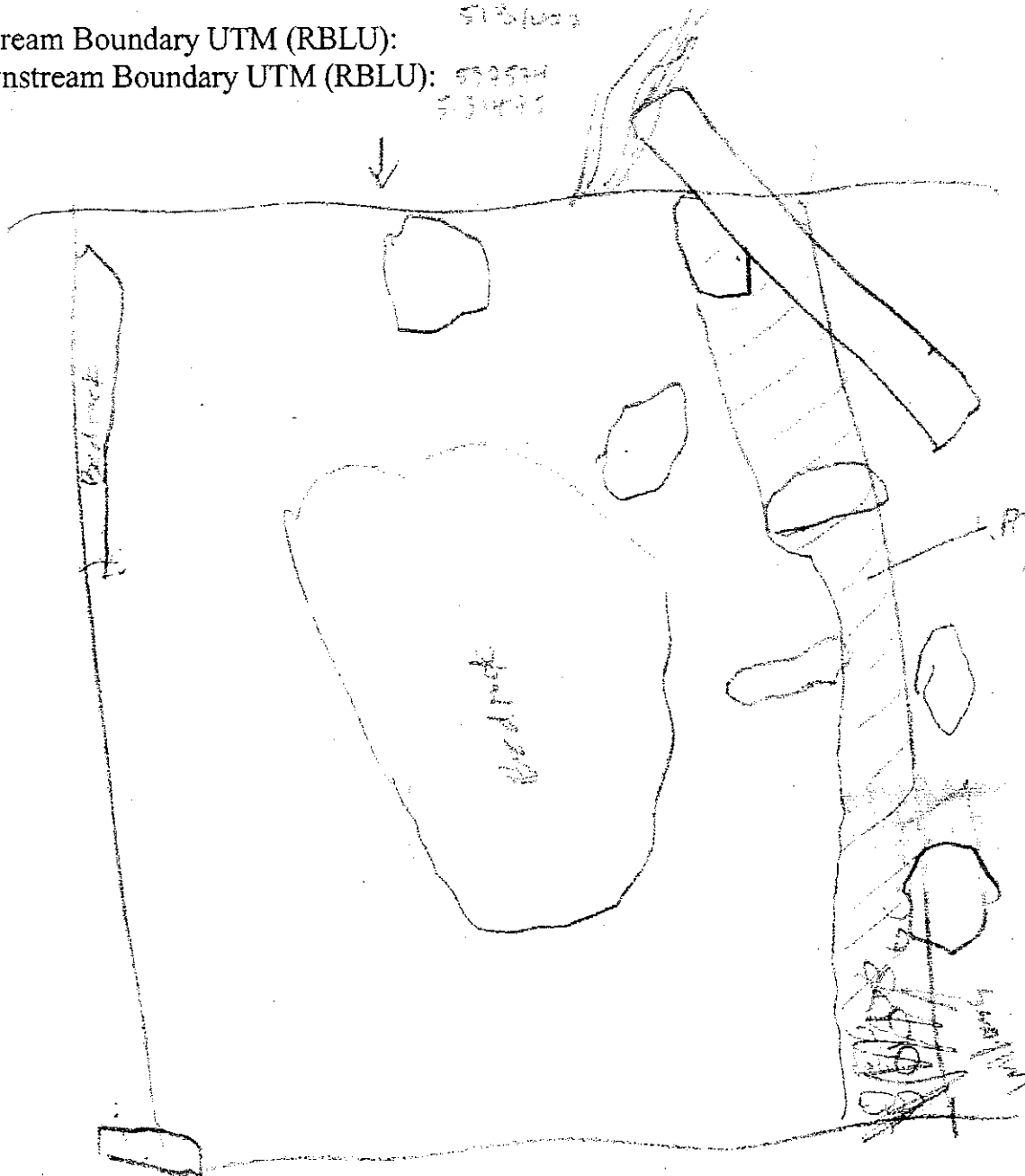
Stream Reach: Section 2

Upstream Boundary UTM (RBLU):

Downstream Boundary UTM (RBLU):

593549
5131000

593549
5131000



Middle section